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Working Paper

Child Poverty and Family Structure during the Recession in English-Speaking Liberal Welfare States

LIS Working Paper Series, No. 665

Provided in Cooperation with:

Luxembourg Income Study (LIS)

Suggested Citation: Rothwell, David W.; McEwen, Annie (2016) : Child Poverty and Family Structure during the Recession in English-Speaking Liberal Welfare States, LIS Working Paper Series, No. 665, Luxembourg Income Study (LIS), Luxembourg

This Version is available at:

<https://hdl.handle.net/10419/169225>

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LIS

Working Paper Series

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Child Poverty and Family Structure during the Recession in English-speaking Liberal Welfare States

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February 2016



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Child Poverty and Family Structure During the Recession in English-speaking Liberal
Welfare States

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Abstract

While the 2008 global economic crisis is over and many countries are into a recovery phase, the impacts continue to linger. Analysis of its aftermath offers insight into how economic shocks reverberate through modern economies to affect the lives of children and families and how governments respond to economic crises. We calculate child poverty rates before and during the Great Recession in five nations - Australia, Canada, Ireland, the United Kingdom and United States. Data are from the latest nationally representative and harmonized household survey data available from the LIS Cross-National Data Center (Waves VII and VIII, approximately aligning with years 2007 and 2010).

The study adds new knowledge in several ways. Welfare policies of the selected countries share common reliance on means-tested social assistance, higher economic inequality, and less unionization. While prior studies have examined within-country and cross-country variation in child poverty outside of the Recession, this paper investigates variation within welfare regime during a crisis. Second, within each country, we quantify the impact that market, social policy transfers, and taxes had on child poverty. Last, within countries, we examine how children's family structure affected their chances of living in poverty.

We find large variations in child poverty rates during this period. Using a poverty threshold anchored in the 2007 distribution, across countries child poverty increased the most in Ireland and Australia and decreased the most in the UK and Canada. The US experienced only marginal changes in child poverty. Within countries, we find that children in married families have the lowest risk of poverty, except for the UK where the probability of being poor was lower for single and cohabitating families. Decomposing poverty rates by income source (labor, transfers, and taxes) over time, we quantify the contribution to the change in poverty rate. Labor earnings explained the poverty reduction in Canada and UK changes in poverty occurred primarily via transfers. In the US, the transfer system offset what would have been a large increase in poverty (4-percentage point). We then disaggregate these changes within country by family structure, finding significant variations in how earnings and social transfers affected children. Together, these findings document the impact of the different levels of cushioning provided by liberal welfare states in the Great Recession and the resulting differing relative poverty risks of different family structures.

Keywords: social policy, recession, child poverty, liberal welfare states, child policy, family policy,

The Global Recession of 2008 was the largest disruption to the global economy since the Great Depression of the 1930s and its impacts continue to linger. Looking at how children fared through the period, as one of the most vulnerable sub-populations in society, offers insight into how economic shocks reverberate through modern economies. It provides an opportunity to see how existing social policy frameworks and government responses to recession affect poverty risks.

Cross-country variation in child poverty has been well studied. Many have concluded that social policies and institutional differences account for a substantial portion of the difference in child poverty across countries (Chen & Corak, 2008; Gornick & Jäntti, 2012; Heuveline & Weinshenker, 2008; Rainwater & Smeeding, 2005). But, rarely has cross-national child poverty been studied dynamically, looking at how these policies change over time and interact with market forces, as well as demographics. In response to the economic shocks, countries enacted changes to their social insurance, social security, means-tested income transfers, and tax credits among other mechanisms. The time period before and after the Recession – roughly 2007 and 2010 offers an opportunity to study how governments responded to heightened poverty risk for the most vulnerable brought about by a major market disruption.

In this paper, we examine child poverty during the Recession to understand how children and families were affected and how the social safety nets responded with particular attention to how impacts and policy responses varied across family structure. We focus on five Anglophone countries that have been previously classified as liberal welfare regimes: Australia, Canada, Ireland, the United Kingdom, and the United States (Esping-Andersen, 1990). We ask how well have liberal welfare states protected children versus the overall population from the Great Recession, and has the protection varied across different family structures? To understand the degree to

which child poverty was affected by social welfare transfers, we decompose poverty rates by income source (earnings, social transfers, and taxes) to isolate which factors drove child poverty changes between 2007 and 2010. We then further disaggregate these changes by the child's family structure. We use the latest nationally representative household survey data from Waves VII and VIII of Luxembourg Income Study (LIS), approximately aligning with 2007 (pre-Recession) and 2010 (current Recession). Before introducing the analysis, we review the differences in our countries' experiences of the Recession and pre-existing child and family policy frameworks. We then review the literature on the Recession's impact on children and previous work to explain cross-national differences in child poverty.

Literature Review

The Recession in English-speaking Welfare States

All five countries we examine in this study experienced an economic downturn from 2008 to 2009; however, the exposure to the international fiscal crisis was far from uniform. To compare extremes: in Ireland GDP shrank by 6.4% in 2009, whereas in Australia GDP growth merely slowed to 2% in 2009 (OECD, 2015). Unemployment trends also demonstrate the depth and breadth of the downturn. The US and Ireland were hardest hit: between 2007 and 2009 the US unemployment rate nearly doubled from 4.7% to 9.3%. In Ireland unemployment rose even further from 4.8% to 12.3%. By contrast, in 2009 unemployment was 5.6% in Australia, 7.7% in the UK, and 8.3% in Canada (OECD, 2015).

Among our five countries (and among the OECD countries), Ireland was the hardest hit by the global financial crisis. After almost a decade of exceptional economic growth, in 2007 a crisis in the Irish financial sector and a collapse in

property prices resulted in the government bailing out multiple financial institutions. Ultimately, Ireland itself would require a ‘bail-out’ from the European Union and International Monetary Fund in 2010 to remain solvent. Economically the country was set back to the pre-boom levels of GDP and employment of the mid-1990s (Nolan, Callan, & Maitre, 2012). The US was sent into recession by a similar combination of financial sector collapse and bursting of a housing price bubble, which resulted the largest asset and job losses since the Great Depression of the 1930s (Grusky, Western, & Wimer, 2011). Like the US, the Recession in the UK was the largest since the pre-war years, with significant job losses and major losses in wealth. Canada and Australia, in contrast, did not experience the domestic financial institution crisis of Ireland, the US, or the UK. Canada’s close trade ties to the US economy resulted in a spill-over effect on the Canadian economy and employment; however, for Canada, the Recession was comparable and in fact shorter than recent recessions in the 1980s and 1990s (LaRochelle-Côté & Gilmore, 2009). Of our sample, Australia was the most insulated from the global financial crisis, and did not experience ‘technical’ recession (as defined by two consecutive quarters of GDP contraction). Through the financial crisis years, the economic growth slowed down and there was only a moderate increase in unemployment. Aside from a robust financial system, Australia was bolstered in large part by the country’s ties to the Chinese economy, which persisted with strong growth over this period (McDonald & Morling, 2011).

Different Social Policy Frameworks

The five liberal welfare states we examine share residualist social policy orientations, however, they also vary in terms of their pre-Recession core child and family policies. Thévenon (2011) confirms the overall similarity of our five countries in an examination of parental leave, family income support, and services for children

across OECD countries. He finds that ‘Anglo-Saxon’ countries spend less than OECD counterparts on family support, with policy focused on low-income and single parent families and less support for integrating work and child care. Figure 1 shows countries’ total expenditure on child and family benefits, both cash, in-kind and tax breaks, by percentage of GDP in 2000 and 2009 (OECD, 2015). Policy design aside, expenditure on child and family benefits ranges from less than one percent of GDP in the US to more than four percent of GDP for Ireland and the UK in 2009. Looking at policy delivery, the majority of US benefits are given in-kind (e.g. services, food stamps and housing), whereas Canadian benefits are overwhelmingly given in cash, and Ireland, the UK, and Australia have mixed benefits, though majority cash (Chapple & Richardson, 2009; Garfinkel, Rainwater, & Smeeding, 2010).

[Insert Figure 1 About Here]

Eligibility and coverage of child and family policy also varies across the countries in our sample. Countries employ a mix of universal programs and targeted policies, with targeting differing based on family structure, employment, and income. While it is beyond the scope of this paper to analyze these baseline differences in depth, an appreciation of pre-existing differences in policy settings must inform evaluation of policy response to the Recession. Furthermore, much of cross-national differences in child poverty and policy were pre-existing, and different effects of the Recession depended on not only the responses but also these pre-existing conditions. Others have suggested the impact of social spending has changed before and after the Recession (Chzhen, Hämäläinen, & Vargas, 2014). Corresponding to core differences in child and family policy, the rate of child poverty within the five countries has traditionally differed. Heading into the economic downturn, in 2007 relative child

poverty rate (unanchored, 50% of median) ranged from 11.2% in Ireland, to nearly double that, at 21.9% in the US (LIS, 2015a).

Different Responses to the Recession

Given the differences in the pre-existing social policy settings and the extent of economic downturn, we expect cross-national variation in response to the Recession. Responses in child and family policy varied greatly and were not directly in proportion to the extent of economic decline. Here we focus on policy responses to the Recession that specifically supported families with children, rather than macro-economic adjustments such as monetary policy.

Despite experiencing the least significant economic downturn, Australia responded to the global financial crisis quickly with the largest cash stimulus package in the OECD, aimed to increase consumer spending. This included lump-sum cash payments in 2008-2009 worth nearly 1.5% of GDP (Redmond, Patulny, & Whiteford, 2013). Families with children were prioritized, particularly low-income and single-income families, although not the unemployed. Aside from cash sums to taxpayers (including working parents), 3.9 million children received \$1000 Australian dollars (AUD) cash payments in 2008. In addition, a “Back to School Bonus” of \$950 AUD per school-aged child was also delivered to 1.2 million families, and a single-income family bonus of \$900 AUD was given to 1.5 million families (ILO & World Bank, 2012; Redmond et al., 2013). Redmond and colleagues (2013) make the important distinction, “the purpose of the stimulus package was not to reduce poverty (among children or anyone else), but to keep the economy overall out of recession (pg. 725).” Low-income families with children were targeted as they were most likely to spend the cash immediately.

In contrast to the individual-level cash influx in Australia, the Canadian government focused its ‘economic stimulus’ spending on infrastructure, although it also enacted permanent personal tax cuts, and limited-term freezing of unemployment insurance premiums (Government of Canada, 2012). There were no Recession policy responses specifically aimed at protecting children, not at either the federal or provincial levels. Existing means-tested child benefits for low-income families provided some automatic cushioning. At the national level, child benefit eligibility and amount are determined based on *household* income without any additional protections for lone parents.

The Irish response to the Recession was focused on macro-economic stabilization, rather than the individual-level protections. Prior to the Recession, Ireland had one of the strongest records of poverty mitigation in the OECD through government intervention (measured as difference between pre- and post-transfer poverty rates) (Richardson, 2010). Some of these policies provided automatic cushioning for families facing the effects of the Recession, with the number of recipients of social-assistance payments reaching 2.2 million (approximately half the population) by 2010 (Nolan et al., 2012). While in 2009 the generosity of cash benefits were boosted 3.3% across the board, this expansion would be reversed in 2010 as Ireland moved to austerity.

The UK government’s initial response to Recession in 2008, alongside bank bailouts and monetary measures, included a package of stimulus spending and a temporary reduction in sales tax (VAT). The Labour government also maintained its promise (made prior to Recession) of reducing child poverty with increases to the Child Tax Credit and the Child Tax Benefit. The UK’s policy response to the Recession shifted significantly in Fall 2010 when the country moved from a Labour

government, to a Coalition government under Conservative Prime Minister David Cameron. Since coming to power the Coalition government and subsequent Conservative government has followed a plan of austerity, including a comprehensive spending review with cuts to social assistance and housing benefits, that will disproportionately affect children in low-income families (Brewer, Browne, & Joyce, 2012; Ridge, 2013).

The American Recovery and Relief Act (ARRA), was the largest US policy response to recession since the Great Depression. A number of the policy actions within the ARRA targeted families with children. ARRA expanded the child tax credit for two years, aiding 3 million additional children and increasing benefits by as much as \$825 per child for 10 million children (Garfinkel et al., 2010). The maximum of the Earned Income Tax Credit, which is the largest cash transfer program for families with children, was increased by 21% under ARRA for a total expenditure of \$59 billion in 2009 (Hoynes, 2014; Moffit 2014). In-kind services were also boosted, ARRA increased the Supplementary Nutrition Assistance Program (SNAP, also known as food stamps) benefits by 13.6% for all recipients (ILO & World Bank, 2012; Moffitt, 2015). The ARRA also contained one-time supplemental funding to food banks, school lunches and childcare funding for low-income families. In addition to time-limited enhancements to the safety net, the existing Temporary Assistance for Needy Families (TANF) program should have, by design, provided automatic income stabilization. The overall effects of TANF are continually under study. Despite increased unemployment, TANF caseloads were at historic lows during the Recession, indicating TANF was particularly responsive (Haskins, Albert, & Howard, 2014). However, for children, Bitler and Hoynes (2013) find that reductions in TANF

caseloads and benefits amounts enacted in the mid-1990s reduced the ability of these safety net programs to cushion families experiencing economic shocks.

The Recession and Children

Due to the lag in data access, we are only now beginning to understand the impact of the Recession across countries. Seminal works on the Great Recession, e.g., Grusky, Western, and Wimer (2011) and Jenkins et al. (2012) focus on a single country or do not focus on child poverty explicitly. In one of the first studies to compare cross-country child poverty in Europe during 2008 to 2012, Chzhen (2014) showed that poverty among children rose faster than for the population as a whole in most countries. Further, children in already vulnerable families – workless households, single parent families and migrant families – saw larger increases or slower decreases than the population as a whole.

Another stream of research has begun to investigate the impact of the Recession on child well-being. Because children live, grow, and develop in households, children are indirectly affected by the Recession via the economic impact on the family. For example, job loss, residential moves, material hardship, and family stress, have been shown to negatively impact child well-being in the form of increased social and behavior problems and academic difficulty (Kalil, 2013). As an extreme example, one study showed that declines in US consumer confidence during great Recession were associated with worse parenting and a higher frequency of maternal spanking (Brooks-Gunn, Schneider, & Waldfogel, 2013).

Explaining Differences in Child Poverty

Knowledge about cross-country variation in child poverty has multiplied in the past twenty years with harmonized and comparable datasets. A host of studies has

examined cross-national differences in child poverty at a single point-in-time. Bradbury and Jantti (1999) compared 25 countries and found poverty outcomes that mostly validated Esping-Anderson's three worlds and reported that market incomes are key determinant of outcomes. Later, Rainwater and Smeeding (2005) compared child poverty across 15 countries and were among the first to try to explain the gap in child poverty rates between the US and other countries. They importantly showed that demography (age, gender, size, earnings status) did not explain much of the gap; instead, the gaps could be most explained by differences in social policies. Chen and Corak (2008) corroborated the finding that demography changes slowly and matters little in explaining cross-country differences. They emphasized how changes in employment and earnings mattered much more than demographics and that labor engagement of mothers and fathers was key to understanding differences in child poverty rates.

Within countries, family structure matters greatly for children. Family structure affects child economic well-being and via reductions in economic wellbeing that affect educational attainment, marriage, and family income into adulthood (Lopoo & DeLeire, 2014). As child poverty is measured by household poverty, a number of studies have examined poverty across family structures, with a focus on marital status and gender of household head (Brady & Burroway, 2012; Casper, McLanahan, & Garfinkel, 1994; Christopher, England, Smeeding, & Phillips, 2002; Gornick & Meyers, 2003; Meyers & Gornick, 2001; Pettit & Hook, 2009). For marital status, numerous comparative studies have consistently shown that children in single parent families are at greater risk of poverty than children in two-parent families (Brady & Burroway, 2012; Chzhen, 2014; Gornick & Jantti, 2012; Maldonado & Nieuwenhuis, 2015). And, there is a consistent gender disadvantage overall and for

women-headed families. For example, in English-speaking welfare states, the ratios of poverty for single moms to single dads are large: AU (1.4), CA (2.4), UK (1.6), and US (2.1) (Christopher et al., 2002).

Family Policy and Child Poverty

Social policy surrounding children and families has great influence on society. To various extents, social policy shapes family living standards, reduction of social and market inequalities, child development, work-life balance, gender equality and fertility. Across high-income democracies, while demographic differences are usually modest, policy and institutions with respect to family policy vary widely and importantly shape child poverty (Gornick & Jäntti, 2012). For example, across countries, longer parental leave and higher family allowances are associated with lower child poverty rates (Maldonado & Nieuwenhuis, 2015). Furthermore, relative to other family arrangements, parent leave was more effective at reducing poverty for single mothers and family allowances had the strongest effect for single fathers. Liberal welfare states tend to have similar family policies (Esping-Andersen, 1990; Waldfogel, 2010). For example, countries used in this study, compared to other regimes, tend to provide much less in-kind support to parents with young children; financial (cash) is greater than other countries but is targeted to low-income and preschool children. Comparative research has demonstrated that, in general for Anglophone liberal welfare states, female-to-male employment ratios are higher and the proportion of children enrolled in early childcare is lower than overall OECD averages (see Table 1 in Thévenon & Luci, 2012). Within regime, policy is a major influence on child poverty. For example, the amount of social transfers to children in married families (level effect of redistribution) accounted for more than half of the

difference in poverty rates between the US and other liberal welfare states such as the UK, Canada and Australia (Heuveline & Weinschenker, 2008).

Research Questions

The purpose of this study is to examine child poverty during the Great Recession in a group of English-speaking liberal welfare states. The study is guided by the following research questions: **1. To what extent did child poverty change during the Recession?** This is largely a descriptive question. Child poverty rates were influenced by a wide range of factors including but not limited to the extent to which market earnings and state redistribution changed during the study period.

2. Within countries, to what extent did earnings, transfers, and taxes shape child poverty? Whether a child is poor or not is determined by that child's disposable household income, which is shaped by forces that underwent considerable changes in the Great Recession (market forces as well as direct government policy via taxes and transfers). Therefore, we can decompose the components of household income to understand which components attributed to the observed changes in child poverty. Specifically, we examine changes in earnings, social transfers, and taxes to isolate which factors drove child poverty between 2007 and 2010. The decomposition allows us to answer the counterfactual question: "What would the child poverty rate in country A have been in 2010 had only the distribution of component X changed from the reference period of 2007?"

3. Within countries, to what extent was child poverty equally distributed across family structures? Income is not redistributed equally across families of different structure, which is to say public policies privilege and target some family types while disadvantaging others. This family inequality has implications for child poverty. We advance our understanding of how family shapes poverty by studying six common

family structures derived from marital status and gender of household head. Based on historical patterns (Casper et al., 1994; Christopher et al., 2002; Meyers & Gornick, 2001), in line with poverty demographics outside of recession, we hypothesize that children in married families will have less risk of poverty than those in non-married families. Similarly, we can also hypothesize that children in male-headed single families will have less risk of experiencing poverty than children in single female-headed families. Following previous research, we calculate a poverty advantage ratio based on poverty risk to understand within-country variation across family structure (where ratio above 1.0 is poverty disadvantage). We calculate raw poverty advantage ratios and regression-adjusted poverty advantage ratios.

4. Within countries, to what extent did earnings, transfers, and taxes shape child poverty across family structures?

Using our liberal welfare states during the Recession, we expect that, within-countries, children did not experience poverty equally across family structure. There are at least two explanations. First, under certain policy responses, (e.g., Canada) there was no targeting of social transfers to specific family types. Therefore, similar to Chzhen (2014), we expect that poverty advantages for certain families types might continue or be exacerbated in a Recession that featured such strong labor market shocks. Alternatively, social policies effectively redistribute resources to those at most heightened risk of poverty (e.g., in the Australia example). During the Recession period, families with two potential earners (married and cohabitating) likely were at less risk for falling into poverty during a job loss relative to single earner households. In contrast, depending on the nature of employment and the social insurance provisions through unemployment insurance, an income shock in the form of a job loss can put a single parent at a high risk of poverty. As such, governments may target social assistance to reflect these

relative risks. This leads to a *targeting* hypothesis (Brady & Burroway, 2012) – with less risk of market income poverty, the poverty advantage of married families might be reduced over time. Over the course of the Recession we would expect to see reduced poverty advantage in countries that target policy by family type.

Method

We used data from Waves VII and VIII of the LIS Data Center in Luxembourg (LIS, 2015b). These data correspond roughly to years pre- (2007) and post- (2010) Recession. LIS data have been rigorously harmonized across countries to ensure consistency in measurement. As part of our sample, we use data from Australia (data for Australia is '08), Canada, Ireland, the United Kingdom and United States.¹ The sample countries share common legal, cultural, and institutional histories (Bradbury, Corak, Waldfogel, & Washbrook, 2015). Thus, we aim to avoid countries with vastly different institutional arrangements, noted as a common pitfall in comparative family research (Prince Cooke & Baxter, 2010). These five countries are alike in that they report pre-tax income (referred to as gross datasets in LIS terminology), which is important for understanding how the components of household income shape child poverty over time. Data are nationally representative of each country. For Wave VIII this means we analyze household poverty across countries among a total population of approximately 433 million, including 97 million children.

¹ For Australia the 2008 data were derived from the Survey of Income and Housing Costs (SIHC); 2010 data were from the Household Expenditure Survey (HES) and Survey of Income and Housing (SIH).

Measurement

Income. We use the LIS variable definitions to analyze household income. Disposable household income includes several sources. Specifically, we focus on three aggregated categories: (a) earnings from labor and capital, (b) and transfers and other income, and (c) taxes. Earnings from labor include wages and other employment income. Capital earnings include dividends and returns to investments and rental property. Social transfers are defined as employment-based transfers, universal benefits (not means tested), targeted assistance, private transfers, and other income. As an example, for the US, targeted assistance includes TANF, the Earned Income Tax Credit (EITC), child tax credits, and Supplementary Nutrition Assistance Program (SNAP). Disposable household income was then constructed as the sum of (a) total earnings and capital and (b) social transfers minus (c) income and payroll taxes.

Poverty. To facilitate comparison across countries, we use a relative measure of poverty based on the national income distribution. First, to adjust for household size, we equivalized income by dividing by the square root of the household size. Second, we established the relative poverty threshold at 50% of the median value in the distribution. Third, we construct a binary indicator of household poverty defined as household income below the relative poverty threshold. We then estimate the headcount child poverty ratio as the proportion of the child population (number of children in the household under 18 years of age) living in households with disposable household income below the relative threshold. For the poverty rate of the total population, results were weighted for the total number of people in the household. To account for changes in relative poverty over time in order to distinguish between changes in incomes and changes in the threshold (Chen & Corak, 2008; Smeeding, in

press), we established a poverty threshold anchored in the 2007 distribution. This anchored threshold was the 2007 threshold adjusted for inflation to 2010². All analysis use the anchored measure unless otherwise specified.

Family structure. To understand how poverty was experienced for children in different living arrangements we constructed a six-group typology of families along marital status and gender of household head. First, we focus on children in (a) married, (b) cohabitating, and (c) single households. Then, we analyze gender by isolating (d) single fathers, (e) single mother, no adults present, and (f) single mother, other adults present. The typology accounts for several dimensions that influence household poverty: i.e., number of adults in the household, gender of household head, and marital status of the household. While family structures are more complex than this typology reflects, the categorization allows us to focus on the predominant family patterns across time and country. Furthermore, this typology is comparable to previous methods used to study child poverty with LIS data (Brady & Burroway, 2012; Heuveline & Weinshenker, 2008).

Analysis

For each country-year the household file was merged with the individual file and data were restricted to contain the household head. Data were pooled across countries and years. The analysis proceeded as follows. First, we calculated three poverty rates for each country and year: (a) the year-based relative child poverty rate, (b) the 2007-anchored child poverty rate, and (c) the 2007-anchored overall population poverty rate.

² Inflation adjustments from 2007 included: Australia 1.05 (2010); Canada 1.04 (2010); Ireland 0.98 (2010); UK 1.08 (2010); US 1.05 (2010).

We then decomposed observed changes in the anchored child poverty rates over time into the contributions from each source of the disposable household income. Taking the example of labor earnings in the decomposition, we substitute the distribution of labor earnings in time 2 (2010) by the distribution of labor earnings from time 1 (2007) and keep all the other income sources constant at those observed in time 2. The difference in poverty under this scenario is compared to the observed poverty rate at time 2 and establishes a counterfactual estimate of the contribution of labor earnings to the change (reduction/increase). The same process is conducted for each component of disposable household income. Importantly, our method employs the Shapley (1997) decomposition to address the problem of path dependence. This is executed by calculating all possible contributions of the given components taking the average of the contributions made by each component (Azevedo, Sanfelice, & Nguyen, 2012; Inchauste et al., 2014). Although this method avoids the path dependence problem, the approach is not a dynamic model that accounts for changes in behavior that would likely take place if the income components changed.

Next, we estimated how child poverty varied across family structure and years. We stratified the family structure by marriage and gender. In the marriage analysis, we compared child poverty rates among children living in married, cohabitating and single-headed families. Gender does not feature in the distinction between family types at this level. Next, we analyzed gender within single-parent families by comparing poverty rates across single males, single-females, and single-females with other adults. To aid this analysis we calculate a poverty advantage ratio in reference to either (a) married households, or (b) male-headed single parent households. Next we estimated the likelihood of poverty with logistic regression. For each country we subsampled for families with children and estimated a logistic

regression model predicting poverty (based on disposable household income) as a function of age, education, labor market status, number of children, and household size. Dummy variables for year (2007 as reference) were included and control for unobserved year-specific factors occurring within each country. An interaction term of year-by-family type was included to understand how the risk of poverty changed throughout time. Rather than explain child poverty in a causal sense, this regression approach achieves a descriptive goal of associating child poverty with different family structures after controlling for demographic factors. To address research question 4, we then applied the same decomposition technique described above for each country including analysis across the family structure groups.

Results

1. To what extent did child poverty change in the Recession?

Table 1 displays the poverty rates for Australia, Canada, Ireland, the United Kingdom, and the United States across the years 2007 and 2010. Across countries, and not surprisingly, the US stands out with the highest rates of poverty across all indicators. For each country in 2007, with the exception of Australia, the child poverty rate exceeded the overall poverty rate. The largest gaps between children and overall were observed in Canada (child poverty rate 3.21 percentage points higher) and the US (child poverty rate 4.34 percentage points higher). In 2010, the anchored poverty rates show that children remained at greater risk for poverty compared to the overall population, except for children in the UK. As in 2007, the largest gaps in 2010 was observed for Canada and the US.

The contrast between year-based relative poverty and poverty anchored in the 2007 thresholds suggests different patterns for child poverty through the Recession

(see columns 3 and 4). Using the year-based relative measure across years (columns 1 and 3), child poverty decreased in Canada, Ireland, the UK and the US. The sole increase was observed for Australia: from 12.81 to 14.37. However, because of the change in the income distribution that occurred between years we focus here and in the remainder of the paper on the poverty rates derived from the anchored thresholds. Using the anchored rates (columns 1 and 4), child poverty increased the most in Australia and Ireland, by 1.94 and 5.43 percentage points (p.p.), respectively (column 6). Child poverty declined by just over 2 p.p. in Canada and the UK. Minimal change in child poverty was observed for the US. In Australia, Canada, Ireland and the UK the changes in poverty were greater for children, regardless of the direction. In America, the overall population poverty rate change was about double that for children (.3 compared to .16).

[Insert Table 1 About Here]

2. Within countries, to what extent did earnings, transfers, and taxes shape child poverty?

Changes in anchored child poverty rates between 2007 and 2010 for each country were decomposed into the three components that make up total disposable household income. The components are additive and sum to the observed change in child poverty rate. Figure 1 shows the highest labor impact was observed in Ireland where changes in labor earnings alone would have resulted in an increase in child poverty of about 9.5 p.p. Australia and the US were also exposed to considerable changes in labor earnings with increases of about 5 p.p. in Australia and 4 p.p. in the US. In contrast, labor served to decrease child poverty in Canada by 2.7 p.p. Transfers and taxes had large influences on child poverty, and these impacts varied between countries. The largest influence of the transfer system was observed in the UK and the

US where child poverty rates would have been 4.2 p.p. higher in each country without the transfers and taxes. Australia and Ireland reduced poverty between 2 and 3 p.p., while Canada's transfers reduced poverty by 1.8 p.p.

[Insert Figure 2 About Here]

3. Within countries, to what extent was child poverty equally distributed across family structures?

The weighted distribution of children across family structures are shown in the Appendix. The results indicate considerable variation within the selected group of Anglophone countries. Across time, in all countries, fewer children are living in married households and more children are living in cohabitating families. In both Canada and the UK about 15% of all children live in cohabiting families defined as living with partner but not married. In comparison, the proportion of US children living in cohabitating families was about half that level (7.4%). For single person households, Canada and Australia have relatively low proportions of children living in families headed by a single person rather than couples (married or cohabitating). In Ireland, the UK, and the US, considerably more children are growing up in families headed by a single person (ranging from 22% to 25%). As other have noted using earlier LIS data (Heuveline & Weinshenker, 2008), the US is not exceptional in the proportion of single female headed families. Among the countries included here, the UK had the highest proportion of children in single-female families (17.2%) and Canada the lowest (9.7%).

Table 2 shows child poverty rates across years for different family structures. Ratios indicate whether the family category is advantaged or disadvantaged relative to the reference group. Positive values indicate disadvantage (vice-versa, negative values representative relative advantage). Table 2 Panel A shows that children in families

with a married head almost always experience the lowest risk of poverty (exception was Canada 2007 where the poverty rate of married families at 10.15% was double that of cohabitating 5.41). In 2007, the largest inequality between cohabitating and married poverty was observed in the US (ratio 2.32). Across countries, the disadvantage between married and single-parent families was larger compared to married and cohabitating, with the largest gap observed in Ireland where the child poverty rate for single-headed families was 28.41% (ratio of disadvantage 4.52).

Inequalities in child poverty across family structures were somewhat different 2010. For cohabitating families the ratio increased in two countries (Ireland and the US) and fell in two countries (Canada and the UK). The Irish poverty disadvantage between cohabitating families and married families increased proportionally by 160%, from a small 1.04 to 2.73. Ratios for single parents declined in all countries except the US where only a very small one-tenth increase was observed. In Ireland where cohabitating disadvantage increased, the ratio for single-headed households fell by 1.03. The decline in the risk of child poverty for children in single-headed families relative to married families suggests that social assistance, transfers, and tax credits may have targeted single-parent headed families (with the exception of the US). Importantly for Australia and Ireland, the change in ratios is partially explained by an increased risk of poverty for children living in married families.

[Insert Table 2 About Here]

Panel B in Table 2 stratifies by gender to compare poverty rates for single heads, with male-headed singles as the reference group. With the exception of the UK, single-parent male-headed families in the included countries in all years tend to have lower poverty rates than households with female heads. For example, in 2007 the child poverty rate in Ireland for single parent females was 3.28 times greater than

similar households headed by males. Overall, the disadvantage for single parent female households with other adults tended to be lower than for single-headed females living without adults.

Over this time period child poverty rates for single parent female headed families decreased in Canada, the UK, and the US. Further, the magnitude of gender disadvantage ratios decreased for single-parent females. The largest absolute decrease was observed in Ireland where the ratio fell from 3.28 to 1.94. As the table shows this decrease in the ratio can be explained by an increase in single parent male poverty (not a decrease in single parent female poverty). A massive decrease in poverty for children living in female-headed families with other adults was observed for Australia (46.78 to 15.20). New research has started to document the economic value of such doubling up behaviors (Pilkauskas, Garfinkel, & McLanahan, 2014).

Next, we adjusted these rates with regression to produce the average predicted probability of being poor. The purpose of this analysis was to adjust the observed bivariate rates of child poverty (i.e., risk) reported in Table 2 for demographic factors. Table 3 shows the probabilities of being poor after controlling for age, education, labor market status, number of children, and household size, and year. Significance tests of the coefficients were conducted in relation to the 2007 reference groups in Panel A (married) and Panel B (single-parent male). Full regression results not shown but available by request.

[Insert Table 3 About Here]

Several key findings stand out in comparing Table 2 results to the regression-adjusted results in Table 3. First, inclusion of the covariates greatly reduces the large poverty disadvantage ratios observed in Table 2. And, the magnitude of reduction was larger for single parent families compared to other family structures. Comparing

single headed households with married households of comparable levels of age, education, and labor market status greatly reduces the marital disadvantage. Consider two examples. In Canada, the bivariate ratio was 3.67 in 2007 compared to the regression-adjusted ratio of 1.40. And, in the UK in 2010, the bivariate ratio of 1.94 was reversed to .71 in the regression models. Second, the regression adjustment had a similar, albeit to a lesser magnitude, impact on the risk of poverty for cohabitating families compared to married. Again, we see the ratio reverse directions in the regression for the UK: 2010 ratio changed from 1.11 to .87. Third, Table 3 shows statistically significant changes in child poverty rates over time for children in married families for all countries except the UK. Australia and Ireland witnessed meaningful increases, while Canada and the US saw significant decreases (there was no statistically significant difference across years for married children in the UK). At 40%, the US stands out with the highest likelihood of child poverty among single households (more than double that of the nearest country Ireland). Last, by far the highest child poverty disadvantage by family type was observed for American children living in single-parent households in 2010 (approximately 2.87 times more likely to be poor than children in married families).

Panel B shows that, even after adjusting for covariates and with the exception of the UK, children in single-parent female-headed families had higher predicted probabilities of experiencing poverty than their male-headed counterparts. And, these differences were statistically significant for Canada, Ireland, and the US. Table 3 also shows that for single parent female-headed families with other adults the predicted poverty rate ratios were all below 1, with the exception of the US. Across time, poverty for single-parent families headed by a male decreased in all countries but Ireland (significant decreases in Canada, the UK and US). The largest group of single

parent families – female-headed – saw the predicted probability of poverty decrease between 2007 and 2010 in all countries, with the largest decrease observed in Canada (from 45.74 to 37.15). Nevertheless, gender inequality persisted with disadvantage ratios above 1.0 for all countries, except the UK. Across years, whereas both types of female-headed single parents in the UK had lower predicted probabilities than male-headed families, the opposite pattern was observed in the US. In 2010, after controlling for demographic and socio-economic factors, the predicted probability of being poor for US children in single parent female families was about 1.54 times that of single-parent male families, again the largest ratio observed in our sampled countries.

4. Within countries, to what extent did earnings, transfers, and taxes shape child poverty across family structures?

Figure 2 shows the within-country decomposition results across family structure. The largest decrease in poverty was observed in Canada. From our analysis, we see this change was significant and largely driven by reductions in poverty among single-female headed families. These families experienced a double benefit of transfer and labor and labor reducing poverty, -4.5 p.p. and -6.5 p.p., respectively. Cohabiting Canadian families fared far less well with labor contributing to a 4.6 p.p. increase in the poverty rate. The UK stands out as the only country where child poverty decreased for all children regardless of their family structure. Our analysis shows large poverty reduction influence of the British transfer system for single-parent female families (-13.3 p.p.). For children in the US, labor increased poverty, with the largest labor influence on cohabitating families (10.3 p.p.). The analysis also shows how the US transfer system offset potentially large increases in child poverty: for some family types this lead to a reduction in poverty rates (married and single-

parent females) while for others the transfer impact was insufficient to cushion decreasing market income (cohabitating, single males, and single females with other adults). The Australian results indicate a poverty-increasing influence of the labor market (2 p.p.) that was only barely offset by transfers (-.4 p.p.). The social welfare system was unable to compensate for the large increase in child poverty for single-male households brought about by labor earnings (19.3 p.p.). The magnitude of labor exposure observed for male-headed households in Australia was only topped by cohabitating families in Ireland (25.8 p.p.). Across family structures in Ireland, the social welfare system – via transfers – was overwhelmed by changes in earnings.

[Insert Figure 3 About Here]

Discussion

Previous research has established that institutions and social policies explain a sizable portion of the cross-country variation in child poverty (Chen & Corak, 2008; Gornick & Jäntti, 2012; Heuveline & Weinshenker, 2008). Further, within the regime of liberal welfare states, institutional structures matters tremendously. States can have similar sizes with very different outcomes for social stratification and equity (Esping-Andersen, 1990). Our analysis investigates child poverty in ways that others have not by (1) analyzing changes over time through the Recession, (2) focusing on within-regime changes in poverty, (3) decomposing the contributions to poverty rates into specific functions: market (earnings, capital, other) and policy (taxes and transfers), and (4) disaggregating findings by family structure with explicit focus on marriage and gender.

The fact that children face greater risk of poverty than the overall population is a unique feature of the liberal welfare states (Heuveline & Weinshenker, 2008). In countries where poverty increased – Australia and Ireland – children experienced

greater increases than the overall population. In contrast, in Canada and the UK, countries that saw decreases in poverty, children experienced greater reduction in poverty than the overall population. Between 2007 and 2010, Australia reversed course and went from a country with lower child poverty relative to overall population to children having slightly higher poverty rates in 2010. In 2010, the UK counters the liberal welfare state trend whereby children tend to have higher poverty rates than the overall population. This reality for UK children is the likely result of deliberate political action to reduce child poverty (Waldfogel, 2010). Despite the small change in child poverty over time, the US still posts the highest gap in poverty rates for children relative to the overall population. This last finding supports previous literature documenting how the US places relatively low policy priority on raising the economic standards of American children with families (Gornick & Jäntti, 2012). Some argue that implementing a parental leave policy would help to eliminate this disparity (Garfinkel & Zilanawala, 2015).

Further, our within-regime analysis demonstrates that child poverty outcomes are far from uniform. Using a poverty threshold anchored in 2007, child poverty decreased considerably in two countries – Canada and the UK – and increased in two others – Australia and Ireland, while remaining mostly unchanged in the US. Pre-recession child and family policies and general social safety net features in essence acted as automatic recession responses that differed across our countries of interest. Nevertheless, governments also responded to the Recession differently. The driving forces behind changes in poverty rates varied across countries. In the UK, decreases were mostly attributed to the major role of income transfers, while in Canada the decreases were mostly driven by labor earnings. In Australia and Ireland, the income

transfer systems could simply not compensate for the large shocks to the changes in the labor earnings distributions.

Our findings show a large influence of the US transfer system during the Recession. While this supports previous views on the active response taken by the US federal government (Danziger, 2013), the findings contrast previous cross-country research on child poverty. Numerous studies show how the US redistribution system reduces less poverty than comparative welfare states (Gornick & Jäntti, 2012; Heuveline & Weinshenker, 2008). We find a large poverty-reduction influence of social transfers in the US during a time of market distress. Specifically, the transfer system offset poverty by 4.2 p.p. that equates to about 90% of the overall increase in child poverty that would have occurred because of changes in earnings. While the US transfer system may reduce child poverty less during non-recession times, our analysis shows that, among our five countries only UK social policies did more during the Recession to reduce child poverty.

Using within-country analysis we show that child poverty is not experienced equally across family structure, nor were all children equally affected by the Recession. Not surprisingly, for the most part, children in married-couple families experience a poverty advantage. In 2007, this pattern held for all family types and countries (with the exception of Canada). After regression adjustment, the poverty advantage of married-couple families relative to other family types was in the same direction in 2007 and 2010 for all countries except the UK. There, in 2010, this risk of child poverty for both cohabitating and single parent families was lower than for children in married families. Complementing the regression –adjusted probabilities, our decomposition analysis shows the large poverty-reducing impact of social transfers among single-parent families in the UK (-5.2 p.p., -13.3 p.p., and -7.8 p.p.

for single-male, single-female, and single-female with other adults). In relation to married-couple families, in Canada and the UK in 2010 children in cohabitating families experienced poverty advantage (i.e., lower poverty rates). However, for these children over time, our results show a much more effective social transfer system in the UK where poverty rates would have been 6.6 p.p. higher without the transfer system compared to only .28 p.p. in Canada.

We also examined inequality in poverty across family structure based on gender of household head. Again, we observe variation across countries. For example, using the regression-adjusted poverty probabilities, compared to male-headed single-parent families, female-headed families in the UK actually experience poverty advantage. And, the opposite pattern occurs in the US where male-headed families experience the largest advantage. To some extent, this finding contrasts previous work on gender poverty inequality. Using LIS data, Christopher et al (2002) reported women were at a poverty disadvantage in both the UK and US, although the magnitude of the inequality was higher in the US. While this study focused on children within families, we did not explicitly examine how the Recession affected the gender poverty gap.

In this study, we isolate how the distributions of labor earnings, social transfers and taxes changed over time for different family structures. In three countries, the US, the UK, and Australia, the transfer system attributed to decreases in poverty across all family structures, although the magnitudes ranged widely. The most consistent impact of the transfer system—the lowest variation-across family structures—was observed in the US. In contrast, Canada’s social transfer system stands out as one of the most variable across family structure (transfers reduced poverty for single-parent females by 4.5 p.p. but were associated with an increase in

child poverty for cohabitating .3 p.p. and single-male .7). As we use a dichotomous measure of poverty, it is not possible to tell whether the differences we see in degree of poverty reduction by family structure are by policy design or different economic positions of these family types relative to the poverty threshold. Overall, these results describe considerable within-regime variation that should be considered in comparative welfare state research.

Limitations

Teasing out the effects of the Recession and the social policy response is difficult, with a number of key challenges. The first is the diversity in how the Great Recession affected each country. Changes in unemployment, economic growth, and social spending all occurred in the selected countries but took different forms and in different magnitudes. We need to extend the analysis to 2013 and beyond to fully understand the effects of the Recession and subsequent recovery period, where many countries implemented severe cuts to social spending. At present, for our selected countries, 2013 LIS data is only available for the US. Importantly, our income measure does not include in-kind benefits and underestimates the influence of the welfare state. In the US and other liberal welfare states these in-kind benefits are a major portion of social welfare provisions (Garfinkel et al., 2010; Garfinkel & Zilanawala, 2015). Last, because our measure of cohabitation is unmarried partners we are likely underestimating the percent of families in this arrangement, e.g., cohabitating families living with parents or other adults (Kennedy & Fitch, 2012).

Implications for Policy and Research

We generate a number of avenues for future research. First, there is a need to understand how politics shaped market and redistribution changes over time. Even a

cursory look at the responses to Recession show vast policy differences (stimulus versus austerity) despite shared welfare regime type. It is well established that politics matter for explaining poverty outcomes (Brady, 2009). Our findings open the possibility for future research to explain how within-regime political differences might explain some of the divergent patterns in child poverty.

The finding of varying poverty risks by family structures across countries has important implications for both policy evaluation and cross-national comparison. Our finding that different families experienced the Recession differently is not surprising; however, the finding that government interventions (through tax and transfer) did not respond to these unequal risks is novel. We see that evaluation of the effectiveness of a countries' policy response to rising child poverty changes somewhat when disaggregated by family type. While the UK and Australia had poverty reduction aligned to the family types experiencing the greatest market driven increases in poverty, the US, Ireland and Canada's transfers were not the most effective for families experiencing increasing poverty. In terms of cross national comparison, this would suggest Liberal welfare states privilege different family structures in their policy design in response to financial crisis; alongside different policy delivery, this additional facet of differentiation must be appreciated in future cross-national comparisons of family policy.

Liberal welfare states are expected to experience rising rates of cohabitating families. These changes have implications for understanding child poverty (Cherlin, 2014; Heuveline & Timberlake, 2004; Lundberg & Pollak, 2013; Thomson, Lappegard, Carlson, Evans, & Gray, 2014). Accompanying such demographic changes, there is a need to explain how market and redistributive mechanisms shape poverty rates for this emerging demographic group.

As countries recover from the Recession at differing rates, the impact of the economic downturn is likely to affect children and families far into the future. While the GDP of countries have recovered, in many cases wages and jobs have not, resulting in increasing economic inequality. In this paper, we show within-regime heterogeneity in child poverty outcomes during the Recession. Our results advance the understanding of why welfare states have different distributional consequences and how those distributional consequences vary by family structure.

References

- Azevedo, J. P., Sanfelice, V., & Nguyen, V. (2012). *Shapley decomposition by components of a welfare measure* (Policy Research Working Paper). World Bank.
- Bitler, M., & Hoynes, H. (2013). *The more things change, the more they stay the same? The safety net and poverty in the Great Recession*. National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w19449>
- Bradbury, B., Corak, M., Waldfogel, J., & Washbrook, E. (2015). *Too many children left behind: The US achievement gap in comparative perspective*. New York: Russell Sage Foundation.
- Bradbury, B., Jäntti, M., UNICEF, & others. (1999). *Child poverty across industrialized nations*. Citeseer. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.369.2554&rep=rep1&type=pdf>
- Brady, D. (2009). *Rich democracies, poor people: How politics explain poverty*. Oxford University Press New York.
- Brady, D., & Burroway, R. (2012). Targeting, universalism, and single-mother poverty: A multilevel analysis across 18 affluent democracies. *Demography*, 49(2), 719–746.
- Brewer, M., Browne, J., & Joyce, R. (2012). Child and working-age poverty from 2010 to 2020. *Labour*, 9, 05.
- Brooks-Gunn, J., Schneider, W., & Waldfogel, J. (2013). The Great Recession and the risk for child maltreatment. *Child Abuse & Neglect*, 37(10), 721–729.

- Casper, L. M., McLanahan, S. S., & Garfinkel, I. (1994). The gender-poverty gap: What we can learn from other countries. *American Sociological Review*, 594–605.
- Chapple, S., & Richardson, D. (2009). *Doing better for children*. Paris: OECD.
Retrieved from <http://search.oecd.org/social/family/44453235.pdf>
- Chen, W.-H., & Corak, M. (2008). Child poverty and changes in child poverty. *Demography*, 45(3), 537–553.
- Cherlin, A. J. (2014). *Labor's Love Lost: The Rise and Fall of the Working-class Family in America*. Russell Sage Foundation.
- Christopher, K., England, P., Smeeding, T. M., & Phillips, K. R. (2002). The gender gap in poverty in modern nations: Single motherhood, the market, and the state. *Sociological Perspectives*, 45(3), 219–242.
- Chzhen, Y. (2014). *Child Poverty and Material Deprivation in the European Union during the Great Recession* (No. WP-2014-13). Florence: UNICEF Innocenti Research Centre. Retrieved from <http://www.unicef-irc.org/publications/723>
- Chzhen, Y., Hämäläinen, S., & Vargas, J. (2014). *Significant Changes to Family-related Benefits in Rich Countries during the Great Recession* (No. WP-2014-13). Florence: UNICEF Innocenti Research Centre.
- Danziger, S. (2013). Evaluating the Effects of the Great Recession. *The ANNALS of the American Academy of Political and Social Science*, 650(1), 6–24.
<http://doi.org/10.1177/0002716213500454>
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge, U.K.: Polity Press.
- Garfinkel, I., Rainwater, L., & Smeeding, T. (2010). *Wealth and welfare states: Is America a laggard or leader?* Oxford University Press, USA.

- Garfinkel, I., & Zilanawala, A. (2015). Fragile families in the American welfare state. *Children and Youth Services Review, 55*, 210–221.
<http://doi.org/10.1016/j.chilyouth.2015.05.018>
- Gornick, J. C., & Jäntti, M. (2012). Child poverty in cross-national perspective: Lessons from the Luxembourg Income Study. *Children and Youth Services Review, 34*(3), 558–568.
- Gornick, J. C., & Meyers, M. K. (2003). *Families that work: Policies for reconciling parenthood and employment*. Russell Sage Foundation.
- Government of Canada. (2012). *The Stimulus Phase of Canada's Economic Action Plan: A Final Report to Canadians*. Ottawa: Government of Canada.
Retrieved from <http://www.budget.gc.ca/2012/plan/pdf/Plan2012-eng.pdf>
- Grusky, D. B., Western, B., & Wimer, C. C. (2011). *The great recession*. Russell Sage Foundation.
- Haskins, R., Albert, V., & Howard, K. (2014). *The Responsiveness of the Temporary Assistance for Needy Families Program during the Great Recession*. Washington, D. C.: Brookings Institution. Retrieved from <http://www.brookings.edu/research/papers/2014/08/responsiveness-tanf-great-recessions-haskins>
- Heuveline, P., & Timberlake, J. M. (2004). The role of cohabitation in family formation: The United States in comparative perspective. *Journal of Marriage and Family, 66*(5), 1214–1230. <http://doi.org/10.1111/j.0022-2445.2004.00088.x>
- Heuveline, P., & Weinshenker, M. (2008). The international child poverty gap: does demography matter? *Demography, 45*(1), 173–191.

- Hoynes, H. (2014). A Revolution in Poverty Policy. *Pathways*, (Summer). Retrieved from
from
http://cpi.stanford.edu/_media/pdf/pathways/summer_2014/Pathways_Summer_2014_Hoynes.pdf
- ILO, & World Bank. (2012). *Joint Synthesis Report: Inventory of Policy Responses to the Financial and Economic Crisis* (Publication). Geneva. Retrieved from
http://www.ilo.org/empelm/pubs/WCMS_186324/lang--en/index.htm
- Inchauste, G., Azevedo, J. P., Essama-Nssah, B., Oliveri, S., Nguyen, T. V., Saavedra-Chanduvi, J., & Winkler, H. (2014). *Understanding Changes in Poverty*. The World Bank. Retrieved from
<http://elibrary.worldbank.org/doi/book/10.1596/978-1-4648-0299-7>
- Jenkins, S. P., Brandolini, A., Micklewright, J., & Nolan, B. (Eds.). (2012). *The Great Recession and the Distribution of Household Income*. Oxford University Press.
- Kalil, A. (2013). Effects of the Great Recession on Child Development. *The ANNALS of the American Academy of Political and Social Science*, 650(1), 232–250.
- Kennedy, S., & Fitch, C. (2012). Measuring cohabitation and family structure in the United States: Assessing the impact of new data from the Current Population Survey. *Demography*, 49(4), 1479–1498.
- LaRochelle-Côté, S., & Gilmore, J. (2009). *Canada's employment downturn* (Perspectives No. December). Ottawa: Statistics Canada. Retrieved from
<http://www.statcan.gc.ca/pub/75-001-x/2009112/pdf/11048-eng.pdf>
- LIS. (2015a). *LIS Inequality and Poverty Key Figures*. Luxembourg: LIS. Retrieved from <http://www.lisdatacenter.org>

- LIS. (2015b). *Luxembourg Income Study (LIS) Database* (No. Multiple countries). Luxembourg: LIS. Retrieved from <http://www.lisdatacenter.org>
- Lopoo, L. M., & DeLeire, T. (2014). Family structure and the economic wellbeing of children in youth and adulthood. *Social Science Research, 43*, 30–44. <http://doi.org/10.1016/j.ssresearch.2013.08.004>
- Lundberg, S., & Pollak, R. A. (2013). *Cohabitation and the uneven retreat from marriage in the US, 1950-2010*. National Bureau of Economic Research. Retrieved from <http://www.nber.org/papers/w19413>
- Maldonado, L. C., & Nieuwenhuis, R. (2015). Family policies and single parent poverty in 18 OECD countries, 1978–2008. *Community, Work & Family, 18*(4), 395–415. <http://doi.org/10.1080/13668803.2015.1080661>
- McDonald, T., & Morling, S. (2011). *The Australian economy and the global downturn Part 1: Reasons for resilience* (Economic Round Up No. 2). Canberra: Australian Treasury.
- Meyers, M. K., & Gornick, J. C. (2001). Gendering welfare state variation: Income transfers, employment supports, and family poverty. In N. J. Hirschmann & U. Liebert (Eds.), *Reinventing the welfare state? Feminist theory and comparative analyses of the US and Europe* (pp. 215–243). New Brunswick, NJ: Rutgers University Press.
- Moffitt, R. (2015). The U.S. safety net and work incentives: The Great Recession and beyond. *Journal of Policy Analysis and Management, 34*(2), 458–466. <http://doi.org/10.1002/pam.21819>
- Nolan, B., Callan, T., & Maitre, B. (2012). Country case study—Ireland. In S. P. Jenkins, A. Brandolini, J. Micklewright, & B. Nolan (Eds.), *The Great*

- Recession and the Distribution of Household Income* (pp. 113–129). Oxford: Oxford University Press.
- OECD. (2015). Social expenditure: Aggregated data. Retrieved from <http://dx.doi.org/10.1787/data-00166-en>
- Pettit, B., & Hook, J. L. (2009). *Gendered tradeoffs: Family, social policy, and economic inequality in twenty-one countries*. Russell Sage Foundation New York, NY.
- Pilkaukas, N. V., Garfinkel, I., & McLanahan, S. S. (2014). The Prevalence and Economic Value of Doubling Up. *Demography*, *51*(5), 1667–1676. <http://doi.org/10.1007/s13524-014-0327-4>
- Prince Cooke, L., & Baxter, J. (2010). “Families” in international context: Comparing institutional effects across Western societies. *Journal of Marriage and Family*, *72*(3), 516–536. <http://doi.org/10.1111/j.1741-3737.2010.00716.x>
- Rainwater, L., & Smeeding, T. M. (2005). *Poor Kids In A Rich Country: America’s Children In Comparative Perspective*. Russell Sage Foundation.
- Redmond, G., Patulny, R., & Whiteford, P. (2013). The global financial crisis and child poverty: The case of Australia 2006–10. *Social Policy & Administration*, *47*(6), 709–728.
- Richardson, D. (2010). Child and family policies in a time of economic crisis. *Children & Society*, *24*(6), 495–508.
- Ridge, T. (2013). “We are All in This Together”? The hidden costs of poverty, recession and austerity policies on Britain’s poorest children. *Children & Society*, *27*(5), 406–417.
- Shapley, L. S. (1997). A value for n-person games. In H. Kuhn (Ed.), *Classics in game theory* (p. 69). Princeton, NJ: Princeton University Press.

- Smeeding, T. (in press). Poverty measurement. In *The Oxford handbook of poverty and society*. Oxford, UK: Oxford University Press.
- Thévenon, O. (2011). Family policies in OECD countries: A comparative analysis. *Population and Development Review*, 37(1), 57–87.
- Thévenon, O., & Luci, A. (2012). Reconciling work, family and child outcomes: What implications for family support policies? *Population Research and Policy Review*, 31(6), 855–882. <http://doi.org/10.1007/s11113-012-9254-5>
- Thomson, E., Lappegard, T., Carlson, M., Evans, A., & Gray, E. (2014). Childbearing across partnerships in Australia, the United States, Norway, and Sweden. *Demography*, 51(2), 485–508.
- Waldfoegel, J. (2010). *Britain's war on poverty*. Russell Sage Foundation Publications.

Table 1
Child poverty rates in liberal welfare states 2007, 2010

Country	Child 2007 (1)	Child anchored (2)	Overall 2007 (3)	Child 2010 (3)	Child anchored (4)	Overall anchored (5)	Δ child anchored (6)	Δ overall anchored (7)
AU	12.81	--	14.11	14.37	14.75	14.22	1.94	0.11
CA	15.36	--	12.15	14.37	13.15	11.38	-2.21	-0.77
IE	11.19	--	10.75	10.38	16.62	15.59	5.43	4.84
UK	11.98	--	11.32	9.44	9.84	10.24	-2.14	-1.08
US	21.94	--	17.6	20.93	22.1	17.9	0.16	0.3

Note. Rates are relative based on 50% median value of disposable household income.

Anchored rates based on the 2007 income distribution and adjusted for inflation to 2010. Child anchored 2007 rates are not shown as they are equivalent to the child poverty rates in 2007.

Table 2

Child poverty rates across living arrangements stratified by marital status and gender

	2007			2010		
Panel A						
	Married	Cohabit (ratio)	Single (ratio)	Married	Cohabit (ratio)	Single (ratio)
AU	7.89		34(4.31)	9.75		36.17(3.71)
CA	10.15	5.41(0.53)	37.2(3.67)	9.58	10.2 (1.06)	30.76(3.21)
IE	6.28	6.55(1.04)	28.41(4.52)	9.7	26.48(2.73)	33.88(3.49)
UK	8.13	14.16(1.74)	21.12(2.60)	7.63	11.42(1.50)	14.84(1.94)
US	12.88	29.9(2.32)	45.57(3.54)	12.59	33.81(2.69)	44.67(3.55)
Panel B						
	S.p. male	S.p. female	S.p. female +	S.p. male	S.p. female	S.p. female +
AU	20.62	42.09(2.04)	46.78(2.27)	30.56	43.14(1.41)	15.20(0.50)
CA	16.97	50.39(2.97)	18.6(1.10)	14.66	40.20(2.74)	20.51(1.40)
IE	11.71	38.36(3.28)	11.02(0.94)	21.64	41.95(1.94)	17.59(0.81)
UK	29.75	20.65(0.69)	17.13(0.58)	20.33	14.62(0.72)	12.96(0.64)
US	26.42	54.09(2.05)	38.21(1.45)	27.63	51.70(1.87)	39.79(1.44)

Note. Poverty rates calculated from LIS definition of disposable household income. Reference category in Panel A is married. Reference category in Panel B is single parent male. Ratios are the poverty rate of a given living arrangement over the reference category.

Table 3

Regression adjusted predicted probability of being poor across living arrangements

	2007			2010		
Panel A						
	Married	Cohabit (ratio)	Single (ratio)	Married	Cohabit (ratio)	Single (ratio)
AU	13.64		13.13(0.96)	15.61*		11.90(0.76)
CA	14.35	7.32*(0.51)	20.10(1.40)	13.20*	10.99*(0.83)	15.04*(1.14)
IE	8.85	9.51(1.08)	19.62*(2.22)	11.97*	22.75*(1.90)	19.39*(1.62)
UK	11.50	12.80*(1.11)	11.99(1.04)	11.44	9.92*(0.87)	8.12*(0.71)
US	14.78	22.39*(1.51)	41.44*(2.80)	13.98*	24.55*(1.76)	40.06*(2.87)
Panel B						
	S.p. male	S.p. female	S.p. female +	S.p. male	S.p. female	S.p. female +
AU	38.99	41.55(1.07)	16.68*(0.43)	35.73	39.80(1.11)	15.24*(0.43)
CA	33.27	45.74*(1.37)	23.29*(0.70)	27.03*	37.15*(1.37)	20.91*(0.77)
IE	24.90	36.23*(1.46)	19.46*(0.78)	27.45*	33.88*(1.23)	24.87(0.91)
UK	33.82	19.63*(0.58)	24.18*(0.72)	22.34*	13.75*(0.62)	17.33*(0.78)
US	33.32	52.74*(1.58)	40.82*(1.22)	32.43*	50.06*(1.54)	40.41*(1.25)

Note. Regression models estimated for each country controlling for year, age, education, number of household members, number of children, and employed (1/0). Reference category in Panel A is married. Reference category in Panel B is single parent male. Ratios are the predicted probability of being poor given living arrangement over the reference category. * denotes statistically significant difference from reference category in 2007 $p < .05$.

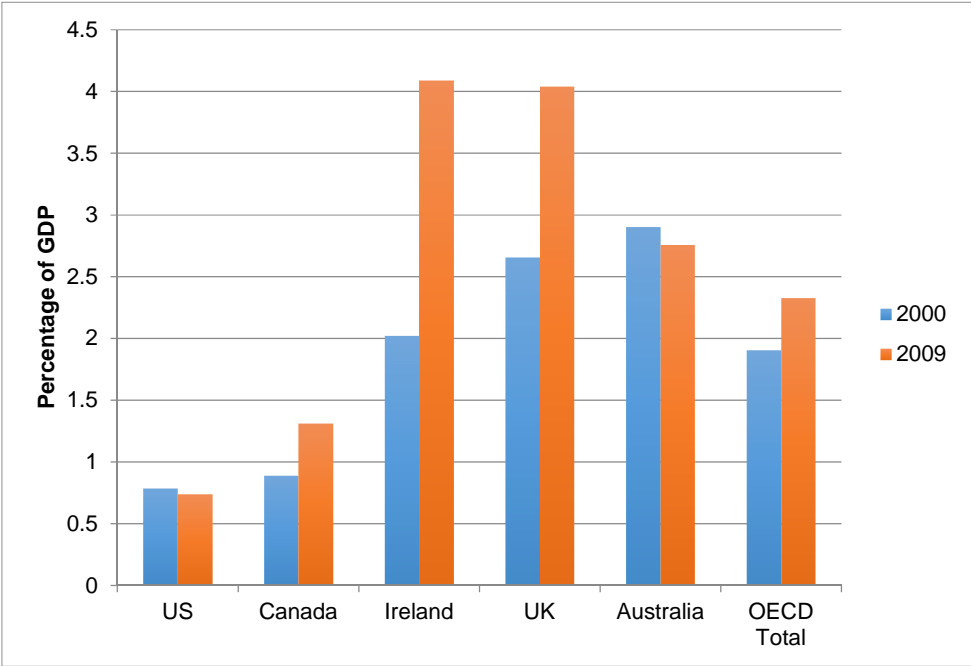


Figure 1. Changes in social expenditures on child and family benefits (cash and in-kind) as % of GDP, 2000 and 2009. Source OECD (2015).

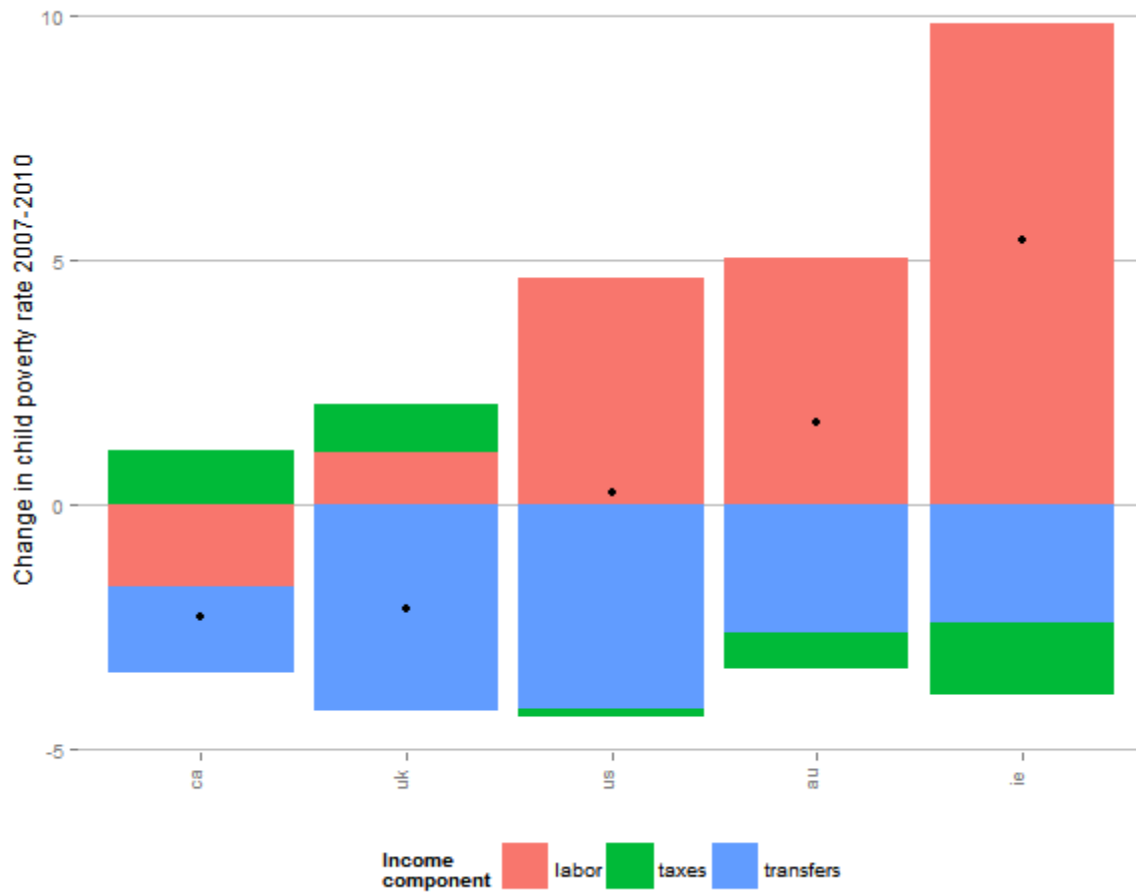


Figure 2. Decomposition of changes in household income between 2007 and 2010 across countries. Labor includes earnings from employment, capital, and other. Solid black dot represents child poverty rate change over time.

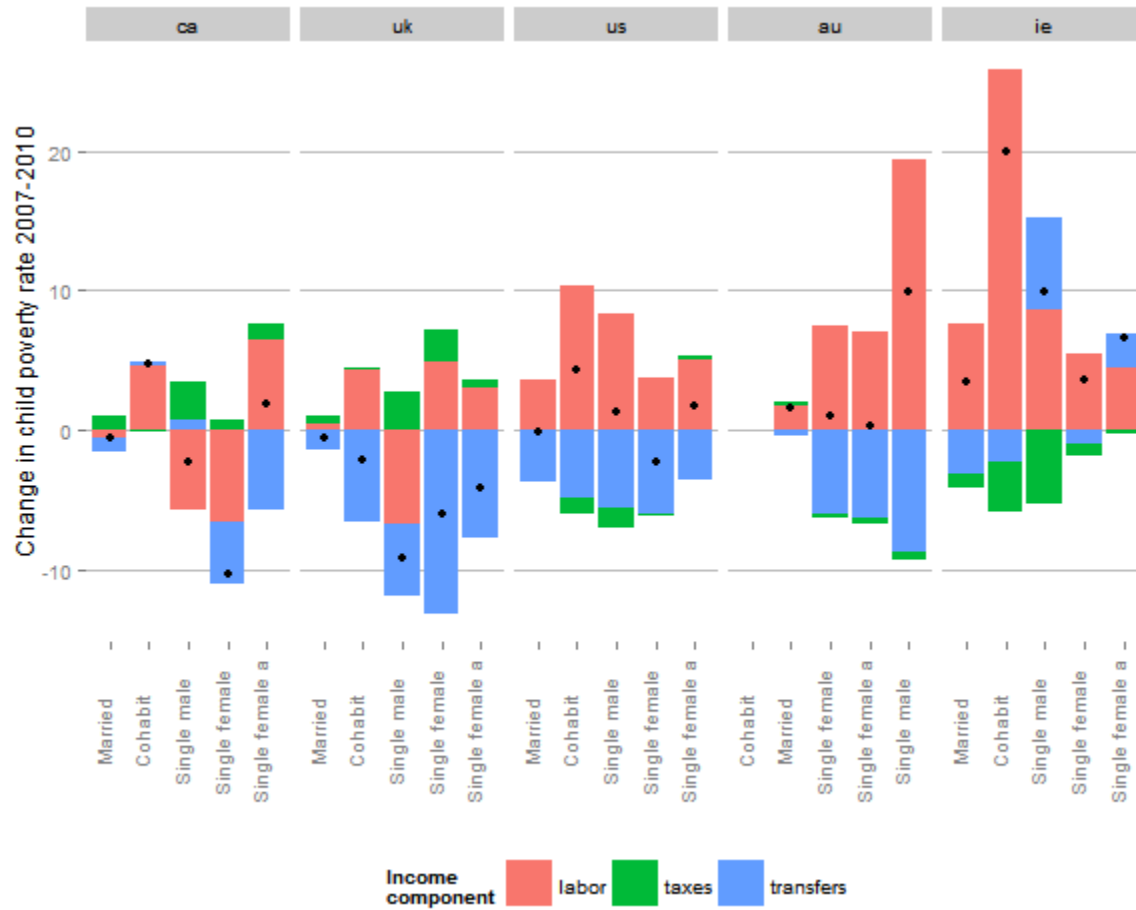


Figure 3. Decomposition of changes in household income between 2007 and 2010 across countries and family structure. Labor includes earnings from employment, capital, and other. Solid black dot represents child poverty rate change over time. No data for cohabitating families in Australia.

Appendix

Distribution of children across family structures

Year	Married	Cohabiting	Single male	Single female	Single female with other adults
<i>Australia</i>					
2007	81.15	n.a.	2.65	12.69	3.51
2010	80.98	n.a.	1.67	13.35	4.00
<i>Canada</i>					
2007	68.28	12.88	4.26	11.11	3.47
2010	68.53	14.54	3.56	9.71	3.67
<i>Ireland</i>					
2007	70.28	7.64	3.12	13.97	4.99
2010	68.51	9.51	1.57	14.27	6.15
<i>United Kingdom</i>					
2007	63.75	12.35	2.31	17.66	3.93
2010	62.33	14.64	1.96	17.29	3.78
<i>United States</i>					
2007	69.24	6.40	3.85	14.12	6.39
2010	67.84	7.40	3.74	13.87	7.15

Note. Weighted percentages from the LIS data.